

## **SANITATION DIVISION**

### **Airport-Larkfield-Wikiup Sanitation Zone**

The Airport-Larkfield-Wikiup Sanitation Zone (Airport SZ) treatment facility was originally designed as a zero discharge facility with the ability to treat to secondary wastewater treatment standards. The treatment facility was initially constructed to treat an average daily dry weather flow of up to 0.3 million gallons per day (mgd). The original design allows for incremental expansion of the treatment facility, in 0.3 mgd increments, to the maximum design treatment capacity of 1.2 mgd. In 1989, an expansion project increased the treatment and disposal capacity to 0.6 mgd. In 1997, a second expansion project increased the treatment capacity to 0.9 mgd.

In October of 1999, the Agency's Board of Directors approved the Airport-Larkfield-Wikiup Sanitation Zone Storage, Reclamation, and Treatment Facilities Project (referred to as the Reclamation Facilities Project). The Reclamation Facilities Project includes construction of up to approximately 200 million gallons of storage, construction of pipelines from existing facilities to new storage sites and/or disposal (reclamation) sites, addition of reclamation sites as necessary, upgrading the treatment facility to tertiary standards, and discharging into the City of Santa Rosa's Geyser's Recharge project. The Reclamation Facilities Project was proposed because treatment facility inflows were nearing the capacity of the existing storage and disposal facilities. When completed, the Reclamation Facilities Project will provide sufficient storage and reclamation capacity to accommodate design flows for current and expected treatment facility expansion projects.

Several elements of the Reclamation Facilities Project are complete. Approximately 110 million gallons of additional storage was constructed at Site D in 2002. This reservoir is now known as Oceanview Reservoir. Also in 2002, the treatment facility was upgraded to tertiary level treatment by the addition of micro-filtration units.

Funding is being requested in FY 04-05 through FY 08-09 to analyze connecting to the City of Santa Rosa's Geysers Recharge pipeline, design of Aeration Basin #4, and repair and/or replacement of portions of the Airport SZ collection system. Total capital costs over the next five years (FY 04-05 through FY 08-09) are estimated to be \$1.3 million, and include \$500,000 for capital repair and/or replacement of portions of the Airport SZ collection system.

### **Forestville County Sanitation District**

The Forestville County Sanitation District (Forestville CSD) treatment facility, which became operational in 1952 and was upgraded in 1962 and 1978, is designed to treat an average dry weather flow of up to 100,000 gallons per day to secondary wastewater treatment standards. The Mirabel Heights Zone of Benefit, was established in 1998, to

extend sanitation service to the Mirabel Heights area. The construction of a collection system and two lift stations to transport wastewater from Mirabel Heights to the Forestville facility was completed in 2000. Between October 1 and May 14 of each year, treated wastewater from the Forestville plant is discharged into Jones Creek, a tributary of Green Valley Creek, which is tributary to the Russian River. Between May 15 and September 30, private property owners use recycled water for irrigation.

In the 1980s, the NCRWQCB issued an action plan based on its Basin Plan, which mandated that all discharges to the Russian River or its tributaries be treated to advanced wastewater treatment (AWT) standards. Various compliance scenarios for the Forestville CSD and Graton Sanitation Zone (SZ) wastewater treatment facilities have been proposed over the last 20 years. In 1996, as part of the "Regional Facilities" project which described a joint effort between Forestville and Graton to meet the AWT requirements, an underground pipeline was constructed between the Forestville CSD and Graton SZ treatment facilities to allow for the transfer of recycled water between these facilities, and the delivery of recycled water to irrigation customers between these locations. The remainder of this project which called for upgrading the Graton SZ, but not Forestville CSD, facilities to AWT was not completed due to financial constraints and lack of public support. A new compliance plan was developed in 2000, which called for upgrading Forestville CSD, but not Graton, to AWT, and installing another recycled water pipeline between the facilities. The additional recycled water pipeline is necessary to allow for the transfer of two different qualities of recycled water: tertiary, which is produced by the AWT process at Forestville, and secondary, which is produced at Graton.

In FY 00-01, Forestville CSD awarded a construction contract for the upgrades necessary to meet AWT standards. The Department of Veteran's Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act of 1999 provided a \$1 million grant for this project. An additional grant and low interest financing for over \$1.5 million was received from the U.S. Department of Agriculture. This financing, combined with the connection of Mirabel Heights (\$170,000) to the Forestville CSD treatment facility, has made the Forestville CSD AWT Upgrade Project financially feasible.

Construction of the AWT facilities began in 2002, with the installation of a new headworks facility. During 2003, the north pond was drained, the sludge was removed, and the inlet/outlet structures were improved; the microfiltration building was constructed; the microfiltration units were installed and began operation; and the south pond was drained, the sludge removed, and the berms raised. This project is scheduled for completion by spring 2004. Upon completion of this project, the permitted capacity of the facility will increase from 100,000 gpd to 130,000 gpd. Because the effluent produced will meet tertiary recycled water standards, there are more opportunities for its use. Recycled water pipelines have been constructed from the Forestville facility to the Forestville Youth Park, Forestville Elementary School, and El Molino High School for irrigation uses. Additionally, the Agency constructed a pipeline from the Forestville facility to Ross Station Road, for tie in to the existing line to Graton. On December 12, 2002, the Agency, Forestville CSD, and Graton SZ entered into a 30-year agreement regarding when and how recycled water could be transferred between plants via the Agency's pipeline. This will

allow secondary recycled water from Graton to be transported to Forestville for tertiary treatment, or for tertiary water to be transported to Graton for reuse or disposal. These recycled water lines are planned for construction in spring 2004. The existing line from Forestville to Iron Horse Vineyards will transport tertiary recycled water to users along the line and to the 14.7 million gallon Iron Horse Vineyard reservoir.

The District plans to turn ownership and operation of the Forestville facility over to the Forestville Water District on July 1, 2004. Forestville CSD staff are working with Forestville Water District staff to ensure a smooth transition.

Upgrades to the Forestville CSD AWT was completed in FY 03-04. No new projects were added to FY 04-05 capital plan for the Forestville CSD.

### **Geyserville Sanitation Zone**

The Geyserville Sanitation Zone (Geyserville SZ) treatment facility became operational in 1981 and is designed to treat an average dry weather flow of up to 92,000 gallons per day. Based on the 1996 Report of Waste Discharge prepared for the Geyserville SZ, current and future treatment facility inflows were expected to remain less than the treatment and disposal capacity of the Geyserville SZ facilities. Accordingly, there are no expansions to the treatment and disposal facilities planned at this time.

Projected capital costs for FY 04-05 (\$30,000) are intended to fund capital replacement projects for replacement of portions of the collection system.

### **Graton Sanitation Zone**

The Graton Sanitation Zone (Graton SZ) treatment facility, which became operational in 1976, is designed to treat an average dry weather flow of up to 140,000 gallons per day to secondary wastewater treatment standards. Treated wastewater from the Graton SZ is discharged into Atascadero Creek, a tributary to the Russian River, between October 1 and May 14 each year and is used by private property owners for irrigation between May 15 and September 30.

In the 1980s, the NCRWQCB issued an action plan based on its Russian River Basin Plan, which mandated that all discharges to the Russian River or its tributaries be treated to AWT standards. In November of 1993, the Graton SZ certified the Forestville and Graton Wastewater Facilities Improvement Project Final Environmental Impact Report (Forestville and Graton EIR), which addressed the environmental impacts of two alternatives that would allow both the Forestville CSD and Graton SZ to comply with the NCRWQCB AWT requirements. The Graton SZ later approved the "Stand Alone" project identified in the Forestville and Graton EIR. The approved project included upgrading both the Forestville CSD and Graton SZ treatment facilities to AWT standards, separately. While portions of the project have been implemented (irrigation of candidate recycled

water user sites), the Graton SZ treatment facility was not upgraded to AWT standards due to financial reasons.

In June of 1995, the Graton SZ approved the “Regional Facilities” project identified in the Forestville and Graton EIR. This project included upgrading the Graton SZ treatment facility, only, to AWT standards. In 1996, as part of the “Regional Facilities” project, an underground pipeline was constructed between the Forestville CSD and Graton Sanitation Zone treatment facilities to allow for the transfer of recycled water between these facilities, and the delivery of recycled water to irrigation customers between these locations. The remaining portions of the “Regional Facilities” project have not been completed due to financial reasons and lack of public support.

In December of 1996, an application was submitted to the Sonoma County Local Agency Formation Commission (LAFCO) to form the Graton Community Services District (GCSD) and dissolve the Agency’s Graton SZ. After LAFCO rejected the initial application as incomplete, representatives of the Graton SZ ratepayers obtained funding to update both the engineering and financial information for a revised LAFCO application. The revised application, which includes a look at several alternatives for complying with the NCRWQCB AWT requirements, was submitted to and approved by LAFCO. The final steps involved in District formation were underway in late 2003, and it is anticipated that the District formation will be finalized in early 2004. The GCSD is scheduled to assume ownership and operational control of the facility on July 1, 2004.

Either the GCSD or the Graton SZ will still need to comply with the NCRWQCB AWT requirements by eliminating discharges to Atascadero Creek or upgrading the Graton wastewater treatment facility to AWT standards. To aid in interim compliance with this requirement, an additional pipeline connecting the Graton SZ to the Forestville CSD will be constructed to increase the operational flexibility of the facilities. On December 12, 2002, the Agency, Forestville CSD, and Graton SZ entered into a 30-year agreement regarding when and how recycled water could be transferred between plants via the Agency’s pipeline. The pipeline, scheduled for construction in spring 2004, will allow effluent (exceeding the needs of recycled water users) from the Graton SZ to be transferred to the Forestville plant for treatment to AWT standards. This will serve as an interim compliance measure until Graton SZ can implement another project that meets NCRWQCB requirements.

The total capital cost for FY04-05 through FY 08-09 are estimated at \$45,000 to fund the capital replacement program for replacement of portions of the collection system.

### **Occidental County Sanitation District**

The Occidental County Sanitation District (Occidental CSD) treatment plant first became operational in 1950 and was upgraded in 1970 and 1975. The plant is designed to treat an

average daily dry weather flow of up to 50,000 gallons per day to secondary treatment standards. Each year, between October 1 and May 14, treated wastewater from the Occidental CSD is discharged into Dutch Bill Creek. During the balance of the year, treated wastewater is used for irrigation.

The Occidental CSD is facing very serious financial and operational difficulties. The treatment plant is in a critical state of disrepair; however, operating revenue and the Occidental CSD's fund balance is inadequate to support required maintenance, repair, or facility improvements. Without near term improvement of the facilities and treatment processes, the Occidental CSD's ability to comply with the conditions of its operating permit remains in doubt.

During FY 97-98, the Occidental CSD was faced with a Civil Lawsuit under the Clean Water Act and an Administrative Civil Liability (Order No. 97-75) was officially adopted by the NCRWQCB in August of 1997 as a result of violations. Increased requirements for sampling and chemical usage, as well as substantial legal fees for multiple lawsuits, have impacted the Occidental CSD's operational expenses.

In addition to the requirements specified above, Cease and Desist Order 97-74 and Time Schedule Order 97-75 required Occidental CSD and Sonoma County Water Agency (SCWA) to address violations at the treatment facility. In response to the Regional Board's Orders, the District hired a local consulting firm (Brelje and Race Consulting Civil Engineers) in 1998 to perform the engineering and environmental studies necessary to upgrade the treatment facility. Two options were evaluated but later abandoned. Based on input from the Regional Board and from the Occidental community, it was determined that a project that addressed the sanitation needs of both Camp Meeker and Occidental represented the best alternative. Cease and Desist Order No. R1-2001-47 was issued in March 2003 that specified new deadlines for the completion of the Camp Meeker/Occidental project. The Order states that all construction of the project must be completed by June 30, 2008.

In October 2001, a Draft Environmental Impact Report (EIR) for the Camp Meeker/Occidental wastewater reclamation project was released and in February 2002 the Final EIR was issued. The preferred alternative includes the following elements:

- A collection system and influent pump station for Camp Meeker
- Reconstruction of the existing collection system in Occidental
- A joint influent pump station
- A tertiary treatment plant
- A new off-stream effluent reservoir
- Effluent polishing wetlands and irrigated woodlands
- Wintertime discharge to Dutch Bill Creek
- Summertime irrigation on pastures and farmlands

The capital plan for the Occidental CSD includes (1) Improvements to wastewater treatment and disposal; and (2) Pond Baffles. Approximately \$19.8 million in project

costs are identified in this capital plan for Occidental CSD over the next five years. Funding for the above projects will be financed mostly through outside funding, such as grants.

### **Penngrove Sanitation Zone**

Agency operations in the Penngrove Sanitation Zone (Penngrove SZ) are limited to administrative services and operation/maintenance of the collection system and pumping station. The wastewater collected by the Penngrove SZ collection system flows through the City of Petaluma's collection system to the City of Petaluma's wastewater treatment facility. Wastewater generated by the Penngrove SZ and Petaluma is treated to meet secondary standards at the City of Petaluma's treatment facility.

City of Petaluma's draft Environmental Impact Report for the new water recycling facility has been certified. The new facility will include extended aeration, secondary clarifiers, oxidation ponds, tertiary filters, UV disinfection and treatment wetlands. Cost estimates for this project are currently at approximately \$90 million. The project is expected to cause a significant increase in the annual service charge over the next five years. These rate increases, when implemented, will be passed on to the Penngrove SZ customers.

Projected costs included in the capital plan for FY 04-05 through FY 08-09 are necessary to address improvement, expansion, and capital replacement requirements of the Penngrove SZ. The projected costs over the next five years (approximately \$1,300,000) are earmarked for: (1) Petaluma's planned treatment facility upgrades (\$510,000); (2) the capital replacement program (\$80,000); and (3) removing and replacing an existing trunk main (\$704,000)

### **Russian River County Sanitation District**

The Russian River County Sanitation District (Russian River CSD) treatment plant was completed in September of 1980 and began operating in 1982. The Russian River CSD treatment plant is designed to treat an average dry weather flow (ADWF) of up to 0.71 million gallons per day (mgd) to advanced (tertiary) wastewater treatment standards. There has been no expansion of significant treatment plant components since the system began operating. The treatment plant has historically experienced operational problems associated with major flooding on the Russian River.

The Russian River CSD has an easement of approximately 77 acres of forest area adjacent to the treatment plant (referred to as the Burch property). 17 acres of the easement are the best suited for irrigation purposes and are currently used for wastewater disposal through spray irrigation. In addition, approximately 43 acres of turf at the Northwood Golf Course is irrigated with tertiary treated wastewater. Expansion of the dry weather disposal area is desirable in order to ensure adequate disposal of inflow as dry weather inflow capacity increases.

Since the Russian River CSD collection system and treatment plant were constructed, there have been upgrades of several components. Components that have been upgraded include

all of the main lift station pumps and the aerators. Components that are planned to be upgraded include the headworks and chlorination contact chamber. Upgrade of these components will improve the reliability of the Russian River CSD collection system and treatment process and reduce operational costs.

The Russian River CSD Board of Directors approved a scope of work and budget for preliminary engineering and environmental documentation on September 10, 1996 to address operational problems associated with Russian River flood events, the irrigation system, and obsolete equipment at the Russian River CSD treatment plant. Work on an environmental impact report (EIR) began in 1997 after a citizens advisory committee, consisting of residents within the Russian River CSD service area, was formed and began meeting with Russian River CSD staff.

On January 30, 1997, the NCRWQCB adopted Order No. 97-9, "Cease and Desist Order for the Russian River County Sanitation District and the Sonoma County Water Agency". In response to this order, the Agency filed a "Report on Order No. 97-9" on March 15, 1997, and a revised report dated March 25, 1997, which proposed to address the issues cited in the Cease and Desist Order by completing an EIR by January of 2000, and completing phase 1 of the solution by January of 2003. The RWQCB responded by adopting Order No. 97-76 which rescinded the Cease and Desist Order, and required that the EIR be completed by May of 1999, and the project completed by March of 2001.

The Russian River CSD released the Russian River County Sanitation District Facility Upgrades and Disposal Expansion Project Draft EIR in accordance with Order No. 97-76 in September of 1998. The Facility Upgrades and Disposal Expansion Project Final EIR (1999 EIR) were set-aside in March of 1999 due to public concern regarding the lack of a precise project description. In April of 1999 the Russian River CSD Board directed staff to proceed with an environmental analysis for the construction of the third aeration basin, secondary clarifier, and tertiary filter at the treatment facility, also known as the Third Unit Processes Project, and identify additional items needed to address flood-related issues.

In May of 1999, the Russian River CSD Board gave staff direction regarding work on three projects previously addressed in the 1999 EIR. Staff was directed to proceed with environmental documentation for increased disinfection capacity and wet weather inflow treatment (previously called equalization storage) opportunities. Implementation of the Third Unit Processes Project was delayed due to the filing of a lawsuit on the project in June of 1999. In 2001, the Russian River CSD received a favorable ruling on the Third Unit Processes Project lawsuit. The Russian River CSD has secured a grant to fund a portion of the Third Unit Processes Project and has begun implementation. Design of the project has been completed and the construction contract was awarded in July 2003. Construction began in December 2003.

On May 28, 1998 the NCRWQCB issued Cease and Desist Order No. 98-57 (Order No. 98-57) to the Russian River CSD and the Sonoma County Water Agency for permit violations at the treatment plant during the flood event of February of 1998. Although the Agency appealed Order No. 98-57, two reports detailing short term and long term

solutions to prevent discharges contrary to the Russian River CSD's Waste Discharge Requirements were submitted to the NCRWQCB in accordance with Order No. 98-57.

On September 23, 1999, the NCRWQCB issued Russian River CSD and the Agency Administrative Civil Liability Order No. 99-69. This order required completion of a collection system study to identify ways to address high flows to the treatment plant during flood events. The order also required the Russian River CSD to complete and implement seven other environmental projects, many of which were included in the short and long term solutions reports. Although the Russian River CSD has appealed Order No. 99-69, the specific studies and environmental projects required by the order have been completed.

The Russian River CSD received a favorable court ruling on its appeal of Order No. 98-57. However, the NCRWQCB appealed the decision, and, the decision was overturned by the Court of Appeal. In consequence, Russian River CSD dropped the appeal of Order No. 99-69 which had raised similar legal issues as the appeal of Order 98-57.

New Waste Discharge Requirements were adopted on November 5, 2003 by the NCRWQCB (Order No. R1-2003-0026). This order does not include the full upset and bypass provisions as stated in the Federal Regulations, apparently because the Regional Board considers the facility to be inadequate to handle flood related inflow. The Order was not appealed, and staff is working with the Regional Board to determine what the plant will need to do to be considered "adequate," and have the upset and bypass defenses reinstated. The average dry weather flow capacity of the treatment and disposal facilities remains at 0.71 mgd in the new permit.

The capital plan for the FY 04-05 through FY 08-09 at the Russian River CSD includes the following: (1) finished construction of the Third Unit Process project; (2) design and construction of an equalization basin; (3) design and construction of a chlorine contact basin; (4) electrical upgrades; (5) disposal and irrigation of wastewater; and (6) significant capital replacement projects. Over \$4.6 million in project costs are identified in this capital plan for the Russian River CSD over the next five years.

### **Sea Ranch Sanitation Zone**

The Sea Ranch Sanitation Zone (Sea Ranch SZ) consists of two wastewater collection and treatment systems located in Central and North Sea Ranch. The Central and North treatment facilities both provide treatment to secondary wastewater treatment standards. Their collection and disposal systems operate independently and are isolated from each other. The Central and North treatment facilities are designed to treat average daily dry weather flows of up to 27,000 and 160,000 gallons per day, respectively. Treated wastewater from the Central treatment facility is disposed of through irrigation on land that is adjacent to the treatment facility. The North treatment facility treated wastewater is pumped to the Gualala Community Services District's wastewater treatment facility (GCSD) for



additional treatment to tertiary standards. The combined effluent of North and GCSD's treatment facility is disposed of through irrigation on the Sea Ranch Golf Link. The Sea Ranch Water Company is under contract to operate and maintain the Sea Ranch SZ facilities for the Agency.

The Agency and the Sea Ranch Association, owner of the Sea Ranch Water Company, continue to investigate options for the continued operation of the Sea Ranch SZ. Options being considered include executing an agreement between the Agency and the Sea Ranch Association for the continued operation of the sewer facilities and the transfer of all assets, liabilities, and management responsibilities to the Association.

Projected capital costs for FY 04-05 through FY 08-09 include approximately \$500,000 for design of effluent storage pond, approximately \$3.5 million to investigate treatment facility inter-tie options, and \$40,000 for repair and replacement of portions of the collection systems.

### **Sonoma Valley County Sanitation District**

The Sonoma Valley County Sanitation District (Sonoma Valley CSD) provides sewage collection, secondary level treatment of wastewater, and disposal service for the Sonoma Valley area. Wastewater is collected by a gravity system and flows to the Sonoma Valley CSD wastewater treatment facility for processing. Recycled water is used to irrigate local crops during the summer. During the winter, treated wastewater is discharged to San Pablo Bay via Schell Slough. The Sonoma Valley CSD treatment facility is designed to treat an average daily dry weather flow of up to 3.0 million gallons per day. The California Regional Water Quality Control Board, San Francisco Bay Region (SFBRWQCB) adopted a new NPDES permit for the Sonoma Valley CSD (Order No. R2-2002-0046) on March 20, 2002. This new permit was developed pursuant to a settlement agreement on the appeal of the previous permit (Order No. 98-111).

In the past, the Sonoma Valley CSD treatment facility has experienced numerous operational difficulties due to high wet weather inflows, worn out and obsolete equipment, and insufficient storage and disposal capacity in the reclamation system. In November of 1997, the Sonoma Valley CSD received an Administrative Civil Liability order from the SFBRWQCB in response to permit violations. The Sonoma Valley CSD responded by accelerating as much as possible the time frame for completion of projects needed to correct the cause of the violations.

To mitigate for a shortage of storage and disposal capability that was identified during the Clean Water Act grant of 1995, the Sonoma Valley CSD released a Final Environmental Impact Report for the Effluent Storage Project in December 1997. In January 1998, the Sonoma Valley CSD Board of Directors approved the construction of a reservoir with a volume of up to 473 acre-feet at the former Overland Flow Facility site. In 2003, effluent storage reservoir R4 was constructed with a volume of 268 acre-feet.

A 1994 study of the collection system showed that approximately 10 of the 120 miles of Sonoma Valley CSD pipeline needs to be repaired or replaced due to deterioration or insufficient capacity. The Sonoma Valley CSD has implemented a capital replacement program with the long-term intent of replacing these pipeline sections. In addition to the 1994 study, the Sonoma Valley CSD completed a wet weather overflow prevention study (a study that complied with a SFBRWQCD issuance of a Notice of Violation for sewer system overflows in April of 1999). This study supplements the 1994 study's results to identified areas within the Sonoma Valley CSD collection system where repair and/or replacement projects were most needed. During FY 04-05, the Fifth Street West Collection system Project is anticipated to be completed.

The Sonoma Valley CSD has completed a substantial number of repairs and improvements in the last five fiscal years, and has plans to complete a number of significant projects in FY 04-05 to address remaining deficiencies. A total of over \$3.2 million is requested in FY 04-05 for the following capital projects: treatment system upgrades to meet tertiary treatment (\$245,000); Monitoring manholes for industrial users (\$300,000); pipeline effluent (\$150,000); Fifth Street West collection system repair/replacement (\$100,000); main sewer trunk repair (\$2,500,000). In addition to the above projects, the five year fiscal plan includes the following projects; recycled water pipeline; Napa-Sonoma Salt Marsh project; and a Bio-Solids Handling Facility. Sonoma Valley CSD capital expenditures are expected to remain high for at least the next few years, totaling over \$15.1 million for the next five years.

### **South Park County Sanitation District**

The South Park County Sanitation District (South Park CSD) provides service to the South Park area using a gravity collection system and lift station at Todd Road. Wastewater from South Park CSD is treated and disposed of by the City of Santa Rosa at the Laguna Sub-regional Treatment Plant on Llano Road. In July of 1996, the City of Santa Rosa accepted responsibility for the operation and routine maintenance of the collection system.

An agreement for transfer of responsibility to the City of Santa Rosa of collection system operation and maintenance, and subsequent dissolution of the South Park CSD, was finalized on February of 1996 and most recently amended in June of 2000. Under this agreement the South Park CSD will be dissolved and transferred to the City of Santa Rosa no later than June 30, 2006. The agreement also requires the South Park CSD to replace, slip-line, or repair 41,610 feet of the collection system and upgrade the Todd Road lift station before transfer of the South Park CSD to the City of Santa Rosa.

South Park CSD is presently replacing or planning to replace seven sections of the collection system between FY 02-03 and FY 05-06. Projects identified include: Moorland Avenue Phase II, Kenmore Lane, Corby Avenue and Victoria Drive, East Robles and Santa Rosa Avenue (on East Robles from Highway 101 to Brooks Avenue), Santa Rosa Avenue (south of East Robles near Todd Road), and Santa Barbara Drive. The collection system projects identified above, along with previously completed (i.e. Todd Road Lift Station)

projects or projects currently underway, will fulfill South Park CSD's responsibilities as required in the dissolution agreement with the City of Santa Rosa.

On December 22, 1998, the NCRWQCB released a draft Cleanup and Abatement Order (CAO) for halogenated volatile organic compounds (HVOCs) found in soil and groundwater in the vicinity of Sebastopol Road and West Avenue in the South Park CSD service area. The draft CAO specified that HVOCs found in the soil and groundwater are the result of a release from the South Park CSD collection system. Potential costs for investigation, remediation, and legal work related to HVOCs in soil and groundwater are substantial (\$2-10 million) and have not been included in this capital plan. Rather than finalize the draft CAO, the South Park CSD, County of Sonoma, and the NCRWQCB entered into a cooperative agreement in July of 1999 referred to as the "Plan of Action for HVOC Investigation and Mitigation in the Roseland Area" (Plan of Action). As part of the Plan of Action, South Park CSD is currently performing an investigation of the extent of HVOCs in groundwater in the vicinity of West Avenue and Sebastopol Road. A final report summarizing the results of this investigation was submitted to the NCRWQCB in February of 2002. The South Park CSD and the County are currently working with the NCRWQCB to coordinate groundwater studies by other parties for related groundwater contamination issues in the Roseland area. Upon completion of these studies, it is anticipated that remediation strategies will be developed by the South Park CSD, County, RWQCB, and other parties associated with these groundwater issues.

**SONOMA COUNTY WATER AGENCY - CAPITAL PROJECTS PLAN**  
**PROJECT FUNDING SUMMARY - SANITATION**  
**FY 2004/05 THROUGH FY 2008/09**

FUNDING SOURCE / NAME	5 YEAR TOTAL FUNDING	PROJECTED FUNDS				
		2004/05	2005/06	2006/07	2007/08	2008/09
<b>SANITATION FUNDS</b>						
Airport/Larkfield/Wikiup Sanitation Zone Construction Fund	1,310,000	110,000	100,000	200,000	800,000	100,000
Forestville County Sanitation District Construction Fund	0	0	0	0	0	0
Geyserville Sanitation Zone Construction Fund	150,000	30,000	30,000	30,000	30,000	30,000
Graton Sanitation Zone Construction Fund	45,000	20,000	25,000	0	0	0
Occidental County Sanitation District Construction Fund	19,833,000	6,951,000	4,780,000	8,102,000	0	0
Penngrove Sanitation Zone Construction Fund	1,294,000	721,000	573,000	0	0	0
Russian River County Sanitation District Construction Fund	4,704,250	822,000	3,132,250	250,000	250,000	250,000
Sea Ranch Sanitation Zone Construction Fund	4,043,000	282,000	3,160,000	351,000	125,000	125,000
Sonoma Valley County Sanitation District Construction Fund	15,120,000	3,295,000	2,325,000	0	7,800,000	1,700,000
South Park County Sanitation District Construction Fund	4,082,500	640,000	442,500	0	1,500,000	1,500,000
<b>Total Sanitation Funds</b>	<b>50,581,750</b>	<b>12,871,000</b>	<b>14,567,750</b>	<b>8,933,000</b>	<b>10,505,000</b>	<b>3,705,000</b>
<b>TOTALS</b>	<b>50,581,750</b>	<b>12,871,000</b>	<b>14,567,750</b>	<b>8,933,000</b>	<b>10,505,000</b>	<b>3,705,000</b>

**SONOMA COUNTY WATER AGENCY - CAPITAL PROJECTS PLAN**  
**PROJECT EXPENDITURE SUMMARY - SANITATION**  
**FY 2004/05 THROUGH FY 2008/09**

PROJECT TITLE	PROJECT DESCRIPTION	5-YEAR PLAN ESTIMATED TOTAL COST	PROJECTED COSTS				
			2004/05	2005/06	2006/07	2007/08	2008/09
<b>AIRPORT/LARKFIELD/WIKIUP SANITATION ZONE</b> FUND 682302							
Capital Replacement Program	Repair/replace collection system	500,000	100,000	100,000	100,000	100,000	100,000
Building Improvements	Aeration Basin #4	800,000	0	0	100,000	700,000	0
Geysers Connection	Analyze connection to Geysers	10,000	10,000	0	0	0	0
TOTALS		1,310,000	110,000	100,000	200,000	800,000	100,000
<b>FORESTVILLE COUNTY SANITATION DISTRICT</b> FUND 650507							
Forestville CSD AWT Upgrade		0	0	0	0	0	0
TOTALS		0	0	0	0	0	0

PROJECT TITLE	PROJECT DESCRIPTION	5-YEAR PLAN ESTIMATED TOTAL COST	PROJECTED COSTS				
			2004/05	2005/06	2006/07	2007/08	2008/09
<b>GEYSERVILLE SANITATION ZONE</b> FUND 681304							
Capital Replacement Program	Lift Station Generator Replacement	150,000	30,000	30,000	30,000	30,000	30,000
TOTALS		150,000	30,000	30,000	30,000	30,000	30,000
<b>GRATON SANITATION ZONE</b> FUND 677310							
Capital Replacement Program	Repair/replace collection system	45,000	20,000	25,000	0	0	0
TOTALS		45,000	20,000	25,000	0	0	0
<b>OCCIDENTAL COUNTY SANITATION DISTRICT</b> FUND 651505							
Building/Improvemtns	Treatment Plant Upgrades	19,833,000	6,951,000	4,780,000	8,102,000	0	0
TOTALS		19,833,000	6,951,000	4,780,000	8,102,000	0	0
<b>PENNGROVE SANITATION ZONE</b> FUND 680306							
Capital Replacement Program	Repair/replace collection system	80,000	40,000	40,000	0	0	0
Treatment Plant Upgrades	Proportional charge for Petaluma plant upgrades	510,000	10,000	500,000	0	0	0
L pipe	Remove & replace existing trunk main	704,000	671,000	33,000	0	0	0
TOTALS		1,294,000	721,000	573,000	0	0	0

PROJECT TITLE	PROJECT DESCRIPTION	5-YEAR PLAN ESTIMATED TOTAL COST	PROJECTED COSTS				
			2004/05	2005/06	2006/07	2007/08	2008/09
RUSSIAN RIVER COUNTY SANITATION DISTRICT FUND 652305							
Capital Replacement Program	Collection System	1,000,000	200,000	200,000	200,000	200,000	200,000
Chlorine Contact Basin		745,000	65,000	680,000			
Facilities Upgrade/Disposal Expansion	Disposal/ Irrigation Disinfection	250,000	50,000	50,000	50,000	50,000	50,000
Replace heating,vent, air conditioning unit		25,000	25,000	0	0	0	0
Diversion chlorine contact chamber to MG1		50,000	50,000	0	0	0	0
Electrical Upgrades		234,250	32,000	202,250	0	0	0
Third Unit Processes Project	Design/ construction	200,000	200,000	0	0	0	0
Equalization Basin	Planning/Environmental/Design	2,200,000	200,000	2,000,000	0	0	0
TOTALS		4,704,250	822,000	3,132,250	250,000	250,000	250,000
SEA RANCH SANITATION ZONE FUND 678300							
Capital Replacement Program	Repair/replace collection system	40,000	40,000	0	0	0	0
Effluent Storage Pond	Environmental/design/construct new storage pond at Central	500,000	0	125,000	125,000	125,000	125,000
Treatment Consolidation		3,503,000	242,000	3,035,000	226,000	0	0
TOTALS		4,043,000	282,000	3,160,000	351,000	125,000	125,000

PROJECT TITLE	PROJECT DESCRIPTION	5-YEAR PLAN ESTIMATED TOTAL COST	PROJECTED COSTS				
			2004/05	2005/06	2006/07	2007/08	2008/09
SONOMA VALLEY COUNTY SANITATION DISTRICT FUND 653303							
Capital Replacement Program	Fifth St. West	100,000	100,000	0	0	0	0
	Main Sewer Trunk Repair	4,825,000	2,500,000	2,325,000	0	0	0
Building/Improvements	Monitoring Mnaholes for Idus Users	300,000	300,000	0	0	0	0
	Manzoni Pipeline	150,000	150,000	0	0	0	0
	Tertiary Plant Upgrades	245,000	245,000	0	0	0	0
	Recycled Water Pipeline	1,700,000	0	0	0	0	1,700,000
	Napa-Sonoma Salt Marsh Project	6,000,000	0	0	0	6,000,000	0
	Bio-Solids Handling Facility	1,800,000	0	0	0	1,800,000	0
TOTALS		15,120,000	3,295,000	2,325,000	0	7,800,000	1,700,000
SOUTH PARK COUNTY SANITATION DISTRICT FUND 654103							
Capital Replacement Program	Coll Syst Repl (Corby/Victoria)	125,000	125,000	0	0	0	0
	Coll Syst Repl (Kenmore Ln)	115,000	115,000	0	0	0	0
	Moorland Ave - Phase II	842,500	400,000	442,500	0	0	0
	Coll Syst Repl (E. Robles/S.R. Av)	1,500,000	0	0	0	1,500,000	0
	Other Collection System per Dissolution Agreement	1,500,000	0	0	0	0	1,500,000
TOTALS		4,082,500	640,000	442,500	0	1,500,000	1,500,000
SANITATION TOTALS		50,581,750	12,871,000	14,567,750	8,933,000	10,505,000	3,705,000